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(54) Pencil box

(57) A pencil box 1 has an outer casing 2, 3 and an inner drawer 6 which can be pulled out of the casing. Inner tray 7 moves with the drawer by its general frictional contact therewith. A "magic" trick can be performed by holding back the tray 7 so that drawer 6 is movable relative thereto while being pulled out of casing 2, 3. Pencils and the like can remain stored away in the casing on inner tray 7, as drawer 6 is pulled out of the casing, giving the illusion of disappearance of the pencils. The tray 7 is held back by engaging on the lid 3 of casing 2, 3 adjacent to end wall 5 to flex a free edge of the lid downwards relative to the upper edge of said end wall, thus projection *p* vertically overlaps the upper end of wall 7b of the tray 7 to prevent the tray from being slid out of the casing during said flexing.

FIG. 5.

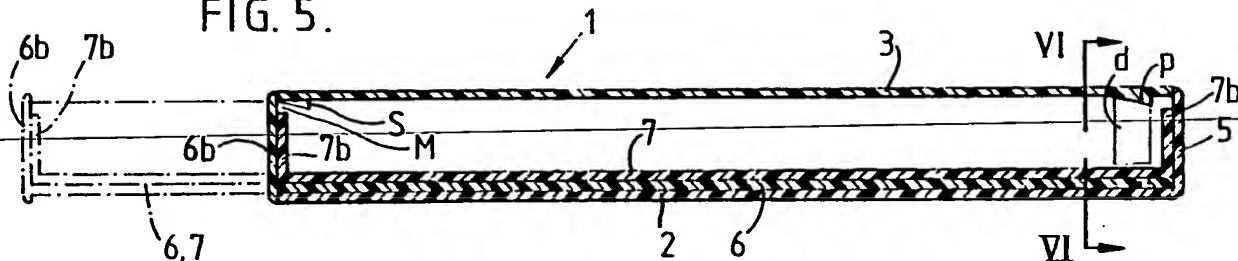


FIG. 1.

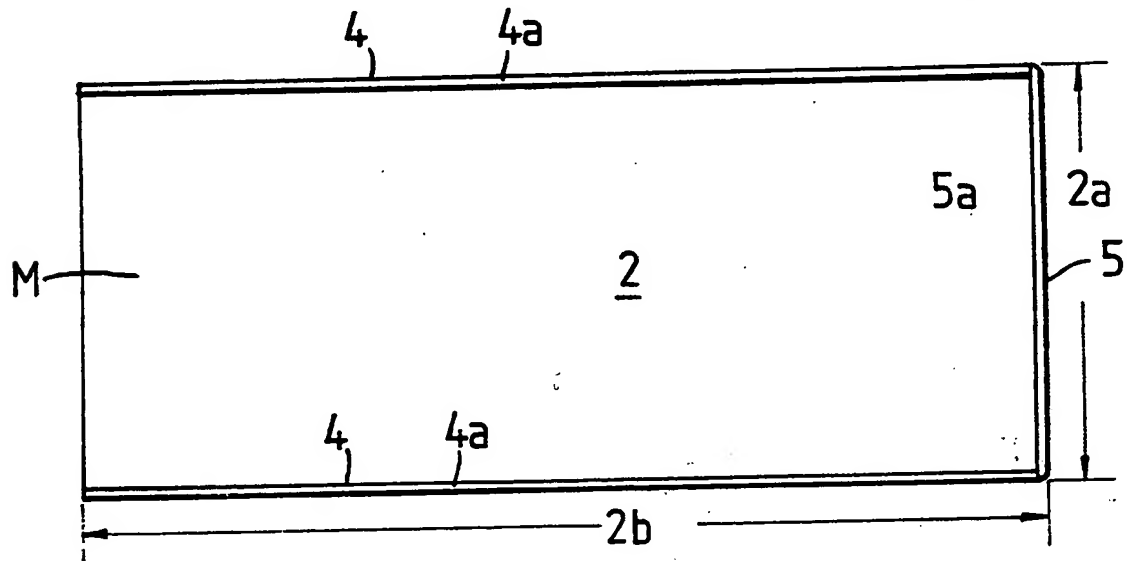
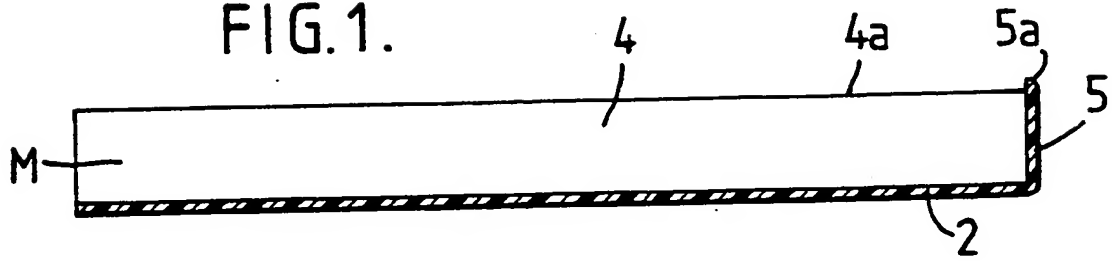


FIG. 2.

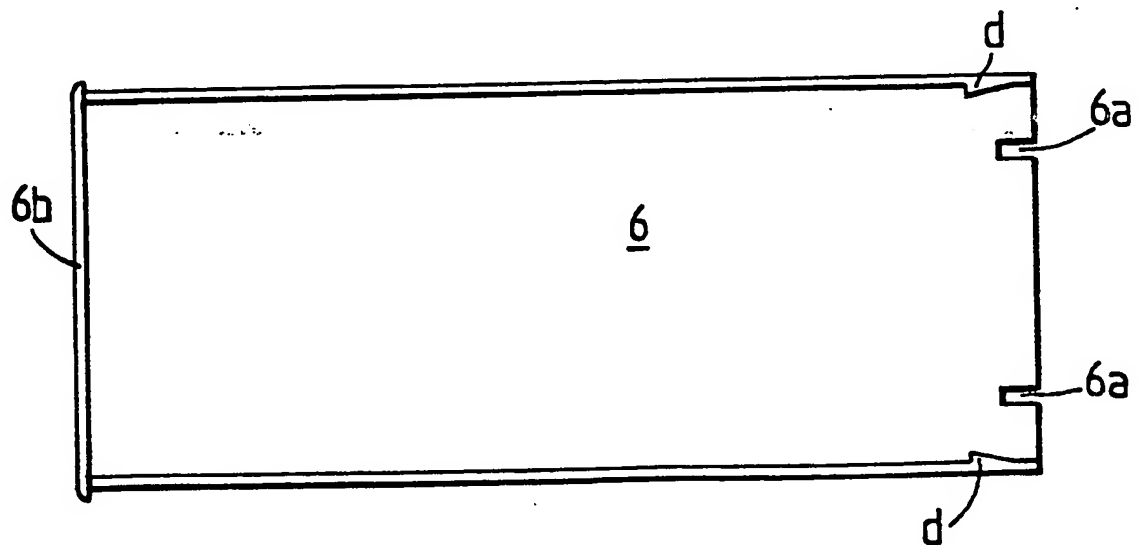
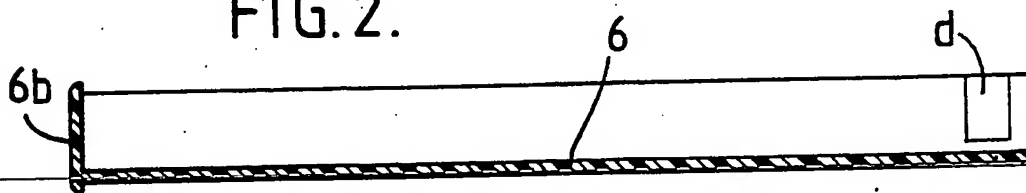


FIG. 3.

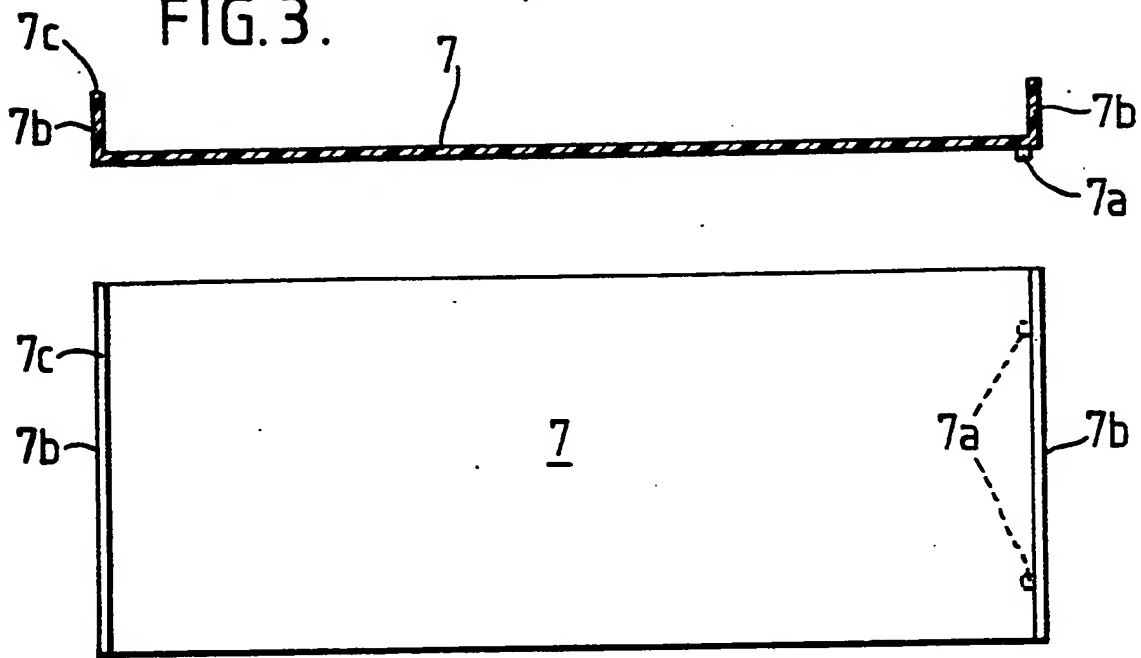


FIG. 4.

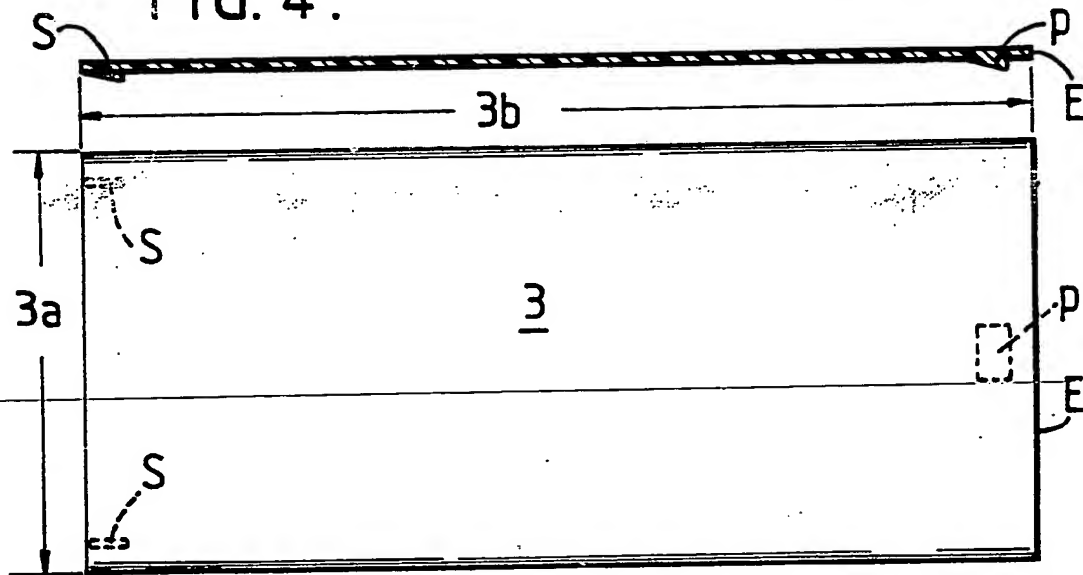
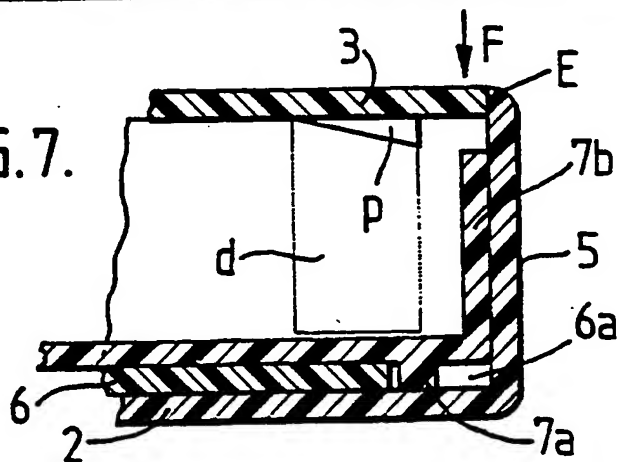
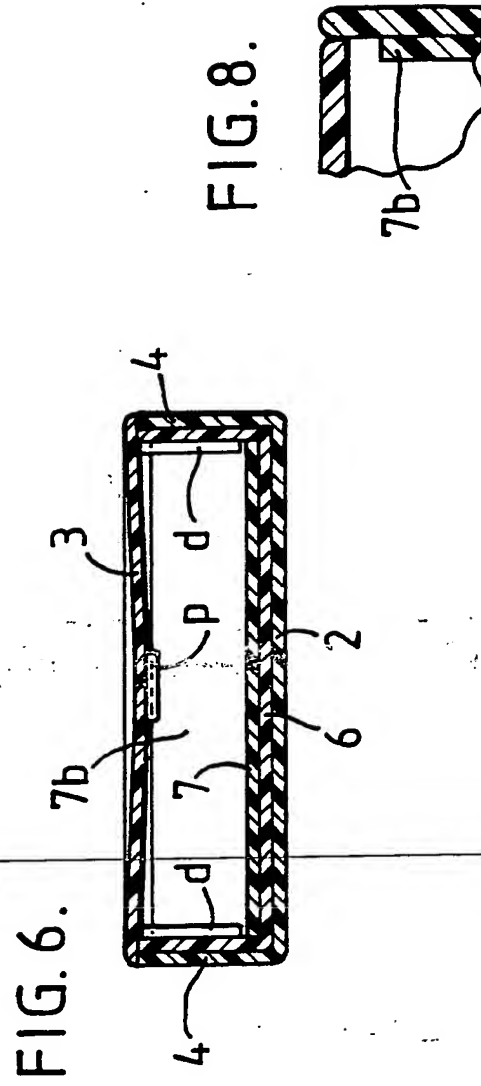
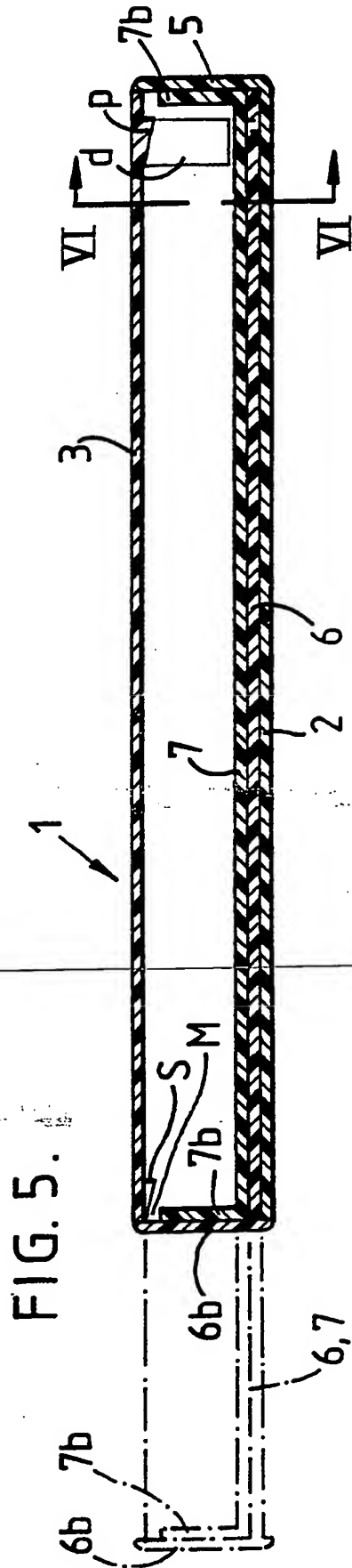


FIG. 7.





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IMPROVEMENTS IN OR RELATING TO STATIONERY

This invention relates to improvements in or relating to stationery and more particularly to a pencil box.

According to the present invention there is provided a pencil box comprising a pull-out drawer received in a casing, said casing having a lid defining a free edge adjacent to, and flexible relative to, an end wall thereof, said free edge extending up to but not overlapping an upper free edge of said end wall, said box further comprising an inner tray in said drawer, the arrangement being such that in normal operation of the box the tray is constrained to move slidably with the drawer during relative slidable movement of the drawer into or out of the casing but, when the box is closed, on downwardly flexing the free edge of the lid adjacent to said end wall of the casing the tray is prevented from being pulled out of the casing with the drawer.

By the present invention a pencil box is provided which can be used to perform a "magic trick". When the box is opened in normal usage, the tray slides with the drawer and to an observer the tray is generally imperceptible as a separate part to the drawer. Pencils (or other items) can be placed in the drawer on the inner tray and the box closed. If the free edge is now flexed

downwardly relative to the adjacent end wall (by squeezing the box gently with the thumb applying pressure on the lid adjacent said free edge) the tray and pencils can be held still relative to the casing as the drawer is pulled out, and the pencils will appear to have disappeared by "magic".

Preferably, the ends of the box are identical in appearance since an irregularity or non-uniformity in the ends of the box may perhaps disadvantageously highlight the mechanism responsible for performance of the "magic" trick, and this could possibly lead to discovery of the "secret" by which the trick is performed, on closer scrutiny of the ends of the box.

Usually, the end wall of the casing will define one end wall of the box with the opposite end wall of the box being defined by the drawer front. In a preferred embodiment, said end walls extend upwardly to the level of the upper surface of the lid to give a neat uniform appearance. The width of the lid is, preferably, equal to the width of a base portion of the casing and at least longitudinal edges of the lid are, preferably, rounded and fit flush onto side walls of said base portion. The upper edges of the end walls of the box are also, preferably, rounded. Usually, the lid will have a downwardly depending projection engageable with said tray, on flexing of said free edge of the lid, to prevent

movement of the tray relative to the casing on movement of the drawer. Preferably, the drawer front overlaps the upper, bottom and side edges around the open mouth of casing 2, 3 (defined by the base and lid) which receives the drawer.

Advantageously, the thickness of the lid may be of similar thickness to the bottom, side and end walls of the base portion so that the lid appears uniform and integral with the base of the casing.

Further advantages and advantageous features will be evident from the following description and drawings of a pencil box in accordance with the present invention.

An embodiment of a pencil box in accordance with the present invention will now be described, by way of example only, with reference to the accompanying drawings in which:-

FIGURES 1 to 4 show to 3/4 scale plan and sectional side views of individual components of the box;

FIGURE 5 shows to full scale a sectional side view of the pencil box;

FIGURE 6 shows to full scale a sectional end view of the box taken on line VI - VI of FIGURE 5 but with lid shown

in a flexed state;

FIGURE 7 shows an enlarged detail of the right hand end of FIGURE 5, and

FIGURE 8 shows a modified detail.

Referring to the FIGURES of the drawings, a plastics pencil box 1 (see more particularly FIGURES 5 and 6) has an outer casing comprising a base portion 2 (FIGURE 1) and lid 3 (FIGURE 4) mounted on the upper edges 4a of opposed longitudinal, upstanding side walls 4 of base portion 2. The width 3a of the lid 3 matches the width 2a of the base portion 2 so that the longitudinal edges of the lid fit flush onto the side walls 4a. The longitudinal edges of the lid will be rounded to present a smooth outward appearance to blend in with the curvature applied to, for example, the upper free edge 5a of the end wall 5 of the base portion 2. The thickness of the lid 3 is identical to the thickness of the bottom, side and end walls of the base portion 2.

The length 3b of the lid is slightly shorter than the length 2b of the casing. The difference in length 2b, 3b is substantially equal to the thickness of end wall 5. The lid 3 is mounted onto the base portion 2 by welding or by adhesive but the edge E of the lid 3 is left free of attachment to the casing 2, so that when the

lid is fixed in place relative to the casing 2, the free edge of the lid extends up to, but does not overlap, the upper edge 5a of the end wall 5 (see FIGURE 7). Thus, the free edge E of the lid positioned closely adjacent to the end wall 5 can be flexed downwardly relative thereto.

The lid 3 has a downwardly depending projection P which is wedge-shaped as shown in FIGURE 4, the purpose of which will be described later on. Additionally, the lid 3 has two further transversely spaced tapered projections or stops S, provided at one end of the lid remote from projection p. The stops S are capable of engaging transverse edges of side detents d of a pull-out drawer 6 to prevent the drawer from being disengaged from the remainder of the box 1.

FIGURE 2 shows the drawer 6 which receives inner tray 7 in a manner which should be evident from the FIGURES with the square projections 7a being located in associated rectangular slots 6a. The drawer front 6b provides an end wall of the pencil box 1, when it is closed (see FIGURE 5), which wall 6b will be opposite end wall 5 of the casing base portion 2, said wall 5 providing the opposite end wall of the box 1. The drawer front 6b overlaps the upper, bottom and side edges of the open mouth M of the casing 2, 3 when the drawer is received in the casing.

As shown in FIGURE 3, the tray 7 has no side walls, only spaced end walls 7b, but if preferred the tray could be provided with side walls. Where such side walls are provided it is envisaged that the drawer 6 will be provided with an upper inwardly extending flange which would overlap the upper edges of the side walls and upper edge 7c of the end wall locatable adjacent the drawer front 6b.

FIGURE 5 shows a sectional side view of the components 2, 3, 6, 7 assembled together to make the pencil box 1. In normal operation of the pencil box 1 the drawer 6 can be pulled out of the casing 2, 3 and the inner tray 7 moves with the drawer by its general engagement with the drawer (i.e. friction contact, engagement of square projections in slots 6a and inertia relative to the inertia of the drawer). Advantageously, the tray is designed so that, in normal operation, there is substantially no relative movement of the tray and drawer as the drawer is moved slidably into and out of the casing 2, 3. The drawer 6 and tray 7 are shown partly pulled-out of the box in chain dotted lines in FIGURE 5. The end walls 5, 6b extend upwardly to the level of the upper surface of lid 3.

Once the drawer 6 is pulled out of casing 2, 3 pencils or the like (not shown) can be placed in the drawer, on top of the inner tray 7, and the box closed to

store the pencils. Moreover, the pencil box 1 is designed so that it may be employed also in the performance of a "magic" trick. The "magic" trick is performed by holding back the tray 7 so that the draw is movable relative thereto while the drawer 6 is pulled out of the casing 2,3. In this manner the pencils will remain stored away in the casing on the inner tray 7 but since they do not appear in the drawer as it is pulled out of the casing, the pencils will "apparently" have disappeared completely by magic. The pencils can be made to return, simply by closing the box and releasing the hold on the tray so that when the drawer is pulled out again the tray moves with the drawer and thus the pencils "reappear".

The present invention provides a very effective and clever way of allowing the inner tray 7 to be held back relative to the drawer 6 without the "secret" of the performance of the "magic" trick being readily apparent to an observer. The observer will not be aware of the existence of the inner tray and the trick may be performed (i.e. the inner tray can be held back) merely by squeezing gently on the lid of the casing 2, 3 adjacent to the end wall 5, preferably near the central region of the free edge E. In this manner a force F (see FIGURES 6 and 7) will be applied to the lid 3 and the free edge E will flex downwardly generally in the manner shown in FIGURE 6, relative to the upper edge 5a of wall

5. As edge E is flexed, projection P vertically overlaps the upper end of end wall 7b adjacent thereto and thus prevents the tray from being slid with the drawer 6 out of the casing. The tray 7 will once again be movable with the drawer 6 on release of pressure on the lid (i.e. the free edge E will then flex back on its own accord, due to its inherent resilience, to its original position in which projection P is free from vertical overlap with said upper end of end wall 7b).

It is believed to be particularly advantageous that the ends of the box 1 appear to be identical so that there is then no reason to suspect that the pencil box is anything other than what it seems to be i.e. just an ordinary pencil box. The box 1 is overall of very neat appearance with the lid 3 of the casing 2 blending in perfectly with the appearance of the casing, in such manner that the casing would appear to have been moulded

in one-piece with said free edge E of the lid 3 appearing to be integral with the upper edge 5a of end wall 5 of the casing. The longitudinal edges of the lid do not protrude from the side walls 4 of the casing and in performance of the magic trick, the slight flexing of the free edge of the lid relative to end wall 5 is hardly detectable and can be done very easily. If the outward appearance of the box were irregular or non-uniform in some way this may suggest that it is needed to be so in order to conceal some mechanism responsible for the

performance of the magic trick. For this reason it is important that the ends of the box 1 should appear to be identical and FIGURE 8 shows a possible modification to the appearance in section of the upper right hand corner of the enlarged detail shown in FIGURE 7. The opposite end of the box may be shaped similarly at the junction of the lid and drawer front and the lower corners may be similarly configured.

It is believed that the particular relative dimensions of the components of the box 1 is advantageous in providing a reliable mechanism for performance of the magic trick (without the inner tray sliding about loosely in the box relative to the drawer).

It is to be understood that the scope of the present invention is not to be unduly limited by the particular choice of terminology and that a specific term may be replaced or supplemented by any equivalent or generic term where sensible. Further it is to be understood that individual features, method or functions related to the pencil box, component parts thereof and/or combinations thereof might be patentably inventive.

CLAIMS

1. A pencil box comprising a pull-out drawer received in a casing, said casing having a lid defining a free edge adjacent to, and flexible relative to, an end wall thereof, said free edge extending up to but not overlapping an upper free edge of said end wall, said box further comprising an inner tray in said drawer, the arrangement being such that in normal operation of the box the tray is constrained to move slidably with the drawer during relative slidable movement of the drawer into or out of the casing but, when the box is closed, on downwardly flexing the free edge of the lid adjacent to said end wall of the casing the tray is prevented from being pulled out of the casing with the drawer.

2. A pencil box as claimed in Claim 1 in which ends of the box are identical in appearance.

3. A pencil box as claimed in Claim 1 or Claim 2 in which said end wall of the casing defines one end wall of the box with an opposite end wall of the box being defined by the drawer front.

4. A pencil box as claimed in Claim 3 in which said end walls extend upwardly to the level of the upper surface of the lid to give a neat uniform appearance.

5. A pencil box as claimed in Claim 3 or Claim 4 in which the width of the lid is equal to the width of a base portion of the casing.

5 6. A pencil box as claimed in Claim 5 in which at least longitudinal edges of the lid are rounded and fit flush onto side walls of said base portion.

7. A pencil box as claimed in Claim 6 in which the
10 upper edges of the end walls of the box are rounded.

8. A pencil box as claimed in any one of the preceding claims in which the lid has a downwardly depending projection engageable with said tray, on flexing of said
15 free edge of the lid, to prevent movement of the tray relative to the casing on movement of the drawer.

~~9. A pencil box as claimed in Claim 3 or any claim~~
dependent therefrom in which the drawer front overlaps
20 the upper, bottom and side edges around the open mouth of casing (defined by the base portion and lid) which receives the drawer.

10. A pencil box as claimed in Claim 5 or any claim
25 dependent therefrom in which the thickness of the lid is of similar thickness to the bottom, side and end walls of the base portion so that the lid appears uniform and integral with the base portion.

11. A pencil box substantially as herein described and illustrated with reference to FIGURES 1 to 7 of the accompanying drawings or when modified substantially as shown in FIGURE 8 of the accompanying drawings.

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